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STATE DOCUMENTS



Palmetto AVIATION

VOLUME 31/NUMBER 6 Published by the South Carolina Aeronautics Commission JULY/AUGUST, 1981



South Carolina Aeronautics Commissioners receive report from consultant.

Consultant says

Four markets could support commuter airline

An aviation consulting firm hired to study air service in the state told the S.C. Aeronautics Commission that four markets should be able to support a commuter-type scheduled air service without assistance.

A fifth market — Florence-Columbia — may require an initial subsidy, but should be self supporting once its visibility is established.

However, Don Cress of Cress and Associates, told the seven-member Commission that subsidies would be necessary for carriers serving Myrtle Beach; the Beaufort-Hilton Head area to Atlanta and the Greenwood-Anderson area to Atlanta.

The markets recommended by Cress for service are: the Green-

ville/Spartanburg-Columbia market; the Charleston-Columbia market; the Florence-Atlanta market which Piedmont will soon be leaving and the Beaufort-Hilton Head-Columbia market.

The study recommendations are based on an analysis of 1,307 questionnaires returned by businessmen in industrial, professional, governmental and retail sectors. The Kentucky-based consultant said he mailed out 4,033 questionnaires and got back about 32 percent, a response he termed "extremely good." Half of those responding said they currently use existing air service.

GREENVILLE/SPARTANBURG-COLUMBIA

Although GSP-CAE is already

being served with four flights a day by Bankair, Cress said the service is ill-timed and recommended four additional flights a day with a small aircraft like the Piper Navajo. "This is the most promising of the in-state routes," he said.

CHARLESTON-COLUMBIA

Cress also said the Charleston-Columbia market should be able to support two more flights a day. Delta is currently serving this market but again, he said, the service is ill-timed.

"It looks like it ought to support at least two other flights," he said. But an operator would have to use a twin-engine turboprop like the Beech 99 because, Cress said, "You're competing with the big guys."

(continued, page 3)



PALMETTO AVIATION is an official publication of the South Carolina Aeronautics Commission. It is designed to inform members of the aviation community, and others interested in aviation, of local developments in aviation and aviation facilities and to keep readers abreast of national and international trends in aviation.

The Aeronautics Commission is a state agency created in 1935 by the S.C. General Assembly to foster and promote air commerce within the state.

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GAO: Control towers don't justify themselves

Air Traffic control towers at three South Carolina airports are among 66 nationwide that don't do enough business to justify the millions of dollars they cost taxpayers annually, the General Accounting Office (GAO) says.

The GAO, the investigative arm of Congress, listed control towers at North Myrtle Beach, Greenville and Spartanburg Downtown Airports among the candidates for closing and included the tower at the Greer Jetport among 17 others where hours of operation could be curtailed.

But the GAO made no recommendations for closing or reducing service at any of the towers, noting that its report to Congress was aimed only at Federal Aviation Administration (FAA) methods for evaluating the need for control towers at various airports.

"The FAA has not taken effective action to discontinue economically unjustified airport traffic control towers or to reduce the operating hours of control towers which meet the criteria for reduced operations," the GAO report concludes. "GAO believes these actions could save millions of dollars."

Operations at the Spartanburg and Greenville Downtown airports have slipped slightly in recent years, primarily because of the rising cost of aircraft fuel, but the decline in flights has apparently leveled off, according to tower officials.

Joe Shirley, FAA tower chief at Spartanburg says approximately 58,000 take offs and landings were

made during the past year, compared to a peak of about 78,000 before fuel costs began to climb. The Spartanburg Tower operates 16 hours a day, from 6 a.m. to 10 p.m.

The tower at Greenville Downtown also operates 16 hours a day but that will soon be reduced by one hour a day, according to tower chief Frank Price. Greenville recorded about 97,000 operations last year which is down a bit from the 140,000 operations reported two years ago. Price also blames the decline on fuel prices.

At North Myrtle Beach, the president of the Professional Air Traffic Controllers Organization (PATCO), Phil Tyler, said closing that tower would have a significant economic impact on the area.

Tyler said there were about 77,000 flights in and out of the Grand Strand airport last year and an anticipated 90,000 by the end of this year. All the tourist traffic which comes by private aircraft to the Grand Strand area must land at North Myrtle Beach Airport, since no private aircraft are allowed at Myrtle Beach Air Force Base/Jetport.

In targeting the control towers, the GAO did not attempt to tell whether certain towers should be discontinued or have operating hours reduced. The report said the main reason for the alleged waste is the FAA's lack of uniform criteria for discontinuing towers that it operates. The GAO also said there was unenthusiastic enforcement of the criteria that do exist.

Plan now to attend fourth airports conference

The fourth annual S.C. Airports conference, sponsored by the S.C. Aeronautics Commission, will be held Sept. 9-11 at the Sheraton Myrtle Beach Inn.

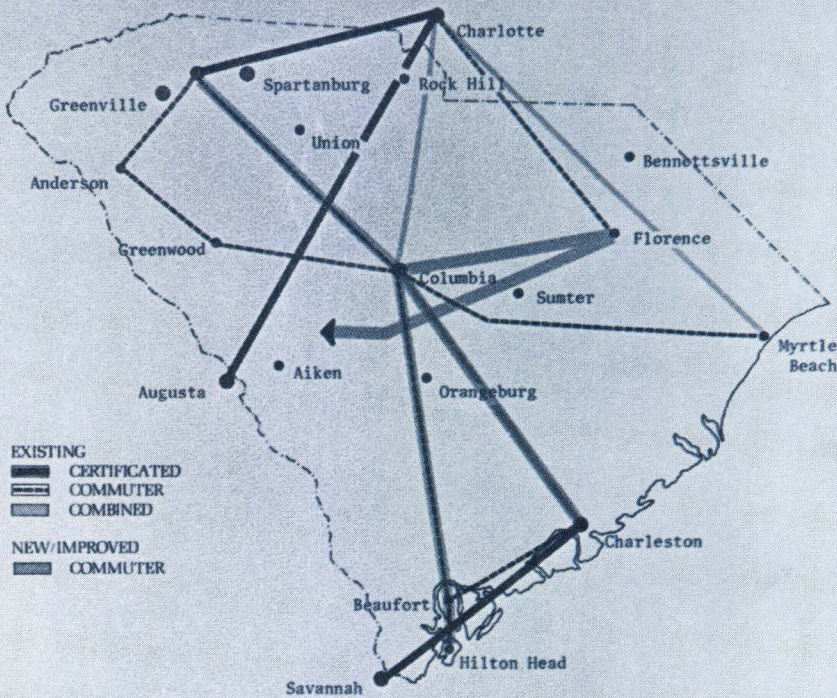
Last year, more than 70 persons, including airport managers, aviation consultants, federal and state representatives, attended the conference and heard speakers on a variety of topics from airport development to air smuggling.

Conference room rates at the Sheraton are \$42 per night for single or double. Reservations should be made before Aug. 14. Reservations can be made by calling the Sheraton at 449-4441 or by calling Jimmy Goff at the commission at 758-2766.

This year's conference promises to be bigger and better than ever before, so don't delay, make plans now to attend Sept. 9-11.

AIR SERVICE RECOMMENDATIONS

WITHOUT STATE SUBSIDY



Piedmont to Increase Grand Strand Service

Piedmont Airlines Vice President for Public Affairs Donald F. McGuire said the carrier has increased its service to the Grand Strand and has no plans for ending flights to and from Myrtle Beach.

"Myrtle Beach is one of the better resorts we serve. Piedmont has no plans whatsoever for pulling out of Myrtle Beach," McGuire said.

He said he wanted to end any reports about Piedmont leaving Myrtle Beach even though the company has filed with the Civil Aeronautics Board for permission to pull out of Florence later this year.

McGuire said Florence "is a different situation" and has not had sufficient boardings per flight for Piedmont to continue service to the upper Pee Dee.

He said Myrtle Beach has shown a steady increase in boardings and that projections point to that trend continuing.

One of the problems at Florence, according to McGuire, has been the

high percentage of passengers using Piedmont for short hauls to reach Atlanta and other airports where they board other airlines for distant points.

He said that traffic is better suited to commuter type aircraft.

"We are pleased with the way things have been going at Myrtle Beach. We have seen an increase in passengers to Boston and the New England states. We expect more and more people to get to the Grand Strand aboard Piedmont," McGuire said.

McGuire said traffic naturally increases during the summertime tourist season at Myrtle Beach and it might be necessary to have more flights then than during the slow beach tourist months of the winter.

"Business at Myrtle Beach has been very good. We hold the airlines golf tournament there. We plan to stay in Myrtle Beach. There is no foundation for any rumors we are planning to pull out of Myrtle Beach. We're there to stay," McGuire said.

(continued from page 1)

FLORENCE-ATLANTA

According to Cress, this route is a good route with enough passengers (40,000 a year) to support four to six round trips per day for a commuter operator.

Although Piedmont has filed notice with the Civil Aeronautics Board that it intends to pull out of Florence, a commuter should be able to make the route pay. A high percentage of Piedmont's Florence passengers use the airline for short hauls to reach Atlanta and other airports where they board other airlines for distant points. Piedmont is flying 737's but an 18-seat commuter aircraft could do nicely.

"Any commuter serving that route may get a subsidy from the federal government but it's got enough passengers so you wouldn't worry about it," Cress said. "It's just a little extra insurance."

Cress said several carriers including Atlantic Southeast, Sunbird and Pinehurst are interested in the route.

COLUMBIA-BEAUFORT-HILTON HEAD

The fourth recommended market for air service is Columbia-Beaufort-Hilton Head. According to Cress, this market has a potential passenger load of 15,000 persons a year if you include those people from the Beaufort-Hilton Head area who want to go on to Charlotte or Greer.

He suggested starting service with three flights a day in a Piper Navajo and upgrading later to an 18-seat Banderrante turboprop.

FLORENCE-COLUMBIA

Cress said the Florence-Columbia market "is one we sort of put on the borderline."

With 10,000 passengers a year, he said it should be able to support itself once it becomes established in the mind of the public.

"Its biggest problem is the closeness of the two points," he said. "The interstate is the biggest competitor to air service. It's tough to compete with that."

Cress recommended three flights a day. But he said the dilemma in this market is getting the frequency to attract people who normally drive without getting into a subsidy situation.

"If you had five flights a day like you should have to make it attractive, you would definitely need to subsidize it," he said.

(continued on page 5)



Hilton Head airport

Traffic Pattern Changed at Hilton Head

The traffic pattern at Hilton Head airport -- which has been non-standard for a number of years -- has been changed to a standard left hand pattern for both runway 3 and 21

The Beaufort County Council approved the change effective July 1 at the request of the FAA for safety reasons.

Now, aircraft landing or taking off from either end of the field will make left hand turns. Previously, aircraft inbound to or departing runway 21 turned right, so as not to overfly the Port Royal Plantation Development.

Local residents of Port Royal Plantation objected to the change but FAA feels that any noise that may be created over the area is insignificant in the face of the accident potential with

the non-standard pattern.

Officials feel the airport is unique in that it attracts people from all over North America, and therein lies the problem.

Pilots from other parts of the country and Canada who come to Hilton Head, often didn't realize the airport had a non-standard pattern and made left turns when approaching 21.

Since much of the traffic at Hilton Head are large twins -- turboprops and jets -- with eight or more people aboard, the potential for a serious accident looms large in the mind of the FAA. By changing the pattern to a standard pattern, that potential is hopefully reduced.

VA Training is Extended

Flight training benefits for American military veterans has been continued beyond the proposed July 1, 1981, cut-off because of the efforts of Aircraft Owners and Pilots Association.

An association executive says the federal government will continue to fund a minimum of 60% to a maximum of 90% of the cost of veterans' flight training at least through the end of September and probably through 1986.

"The deck was so heavily stacked on the side of those Senators supporting continuation of the program that the Senate Veterans Affairs Committee decided not to take a roll call vote," said AOPA Vice President of Legislative Affairs, W. Lawrence Graves.

Graves said his staff has been working for the past 18 months on saving VA flight training and estimated that the Federal Legislative Affairs staff of AOPA had put in a minimum of 300 man-hours the past six weeks.

Opponents of the program had charged abuses within the program and claimed that participating veterans were not moving into cockpit-related jobs. Graves said AOPA was successful in pointing out that there were no abuses; that the criteria used to define "cockpit-related" positions was far too restrictive and that the expanding availability of job opportunities within the commuter and air taxi market was being totally ignored.

"This is a victory of the first order," said Graves, "for AOPA and its members who have earned and deserve these kinds of benefits."

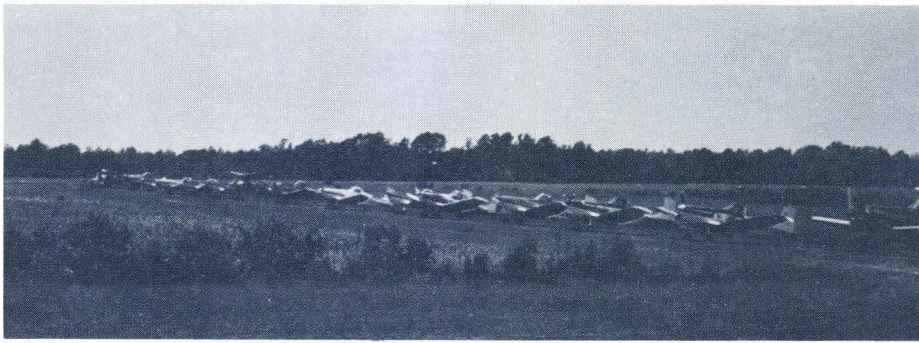
John's Island Airport Name is Changed

The name of the airport on John's Island has been officially changed to Charleston Executive Airport.

The name change was approved by the Charleston County Aviation Authority recently at the suggestion of the airport FBO to generate corporate and industrial traffic.

Ray Thomas, who runs the FBO at Charleston Executive, offers a full line of service and maintenance for corporate and personal aircraft.

The airport identifier, JZI, will not change.



Agricultural aircraft at spray clinic

25 attend spray clinic

The annual S.C. Agricultural Aviation Association spray clinic held May 5 and 6 at the Sumter Airport was one of the most successful in history, according to president Jack Ross.

The clinic is a refresher course for aerial applicators and gives them a chance to practice their swath patterns and calibrate their aircraft for correct droplet size as well as get current information on new chemicals.

This year, 25 pilots flew their own aircraft loaded with a water dye mixture, over a set of test pattern papers to check spray patterns and droplet size. Dr. Barry Jacobsen, of the University of Illinois and members

of the Clemson University staff were on hand to consult with the pilots and aid them in calibrating their aircraft.

"We received letters from Chevron and Clemson University saying they were very pleased with the way we handled it. They thought it was one of the most successful in history," Ross said.

Pilots also saw demonstrated a microcomputer that is supposed to tell them whether they will make money on a job or whether they would be better off giving the job to a competitor.

Another clinic is planned for the spring of 1982.

Breakfast Club



The S.C. Breakfast Club will meet at the following airports in July and August:

July 19 Aiken Airport

August 2 Hartsville Airport

**August 16 Greenwood Airport
(breakfast at Blazer's
Restaurant on the lake).**

Meeting locations have not yet been set for the following dates: Aug. 30, Sept. 13 and Sept. 27. If anyone would like to host the Breakfast Club meeting on those dates, please call club secretary Anne Hawkins at 432-3095.



Berkeley County CAP aids in boat rescues

The Berkeley County Civil Air Patrol Squadron was called out on a number of searches this spring to locate overdue boaters on Lake Moultrie.

The aircraft succeeded in locating two campers that were stranded on an island because of rough water and it found two Navy men wet, but okay, also on an island.

The CAP aircraft was also instrumental in locating and rescuing a group of canoeists who got into trouble after high winds and choppy waters capsized 11 of their boats.

The canoeists, 42 students and six teachers from Airport High School in

(continued from page 3)
**SERVICE THAT WOULD
REQUIRE SUBSIDIES**

COLUMBIA-MYRTLE BEACH

Although Myrtle Beach has a tremendous influx of people in the summer, this market has a lot of discretionary traveling and is not the kind of route that would support a commuter well, Cress said.

"Those people that go to Myrtle Beach are, I think, much more the kind that take all the kids, the floats, the golf clubs and everything. You see them load up the car — maybe take the dog — and everything else but I don't think we are going to see them in an airplane.

COLUMBIA-GREENWOOD-ANDERSON-ATLANTA

Cress recommended that Greenwood and Anderson be served in a market with Columbia with a terminus in Atlanta. This market would also need subsidy because Columbia passengers would not likely ride through to Atlanta since non-stop service is available.

BEAUFORT-HILTON HEAD-COLUMBIA

Cress said this market shows some demand, although not enough to support a commuter independently. However, the subsidy required would not be as great as the subsidies needed in the other two markets above, he said.

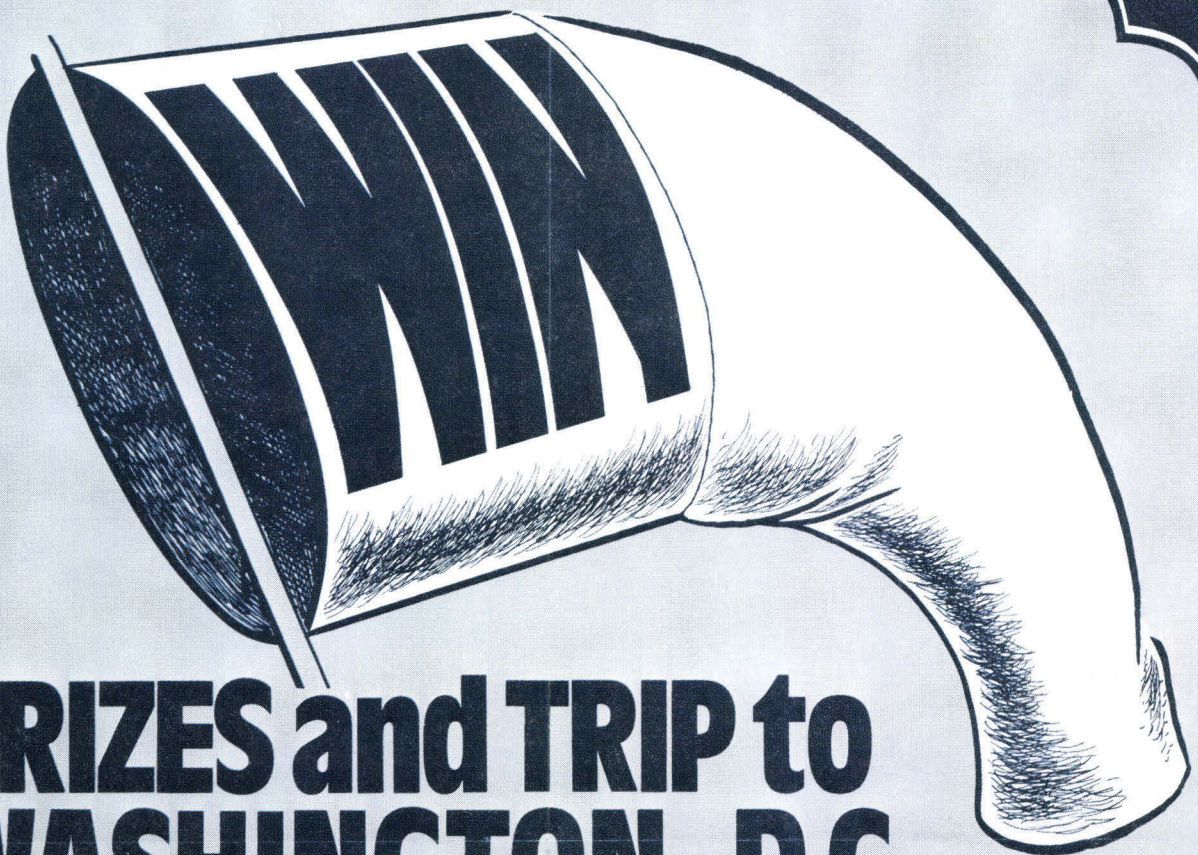
In looking at other markets, Cress found too much service on the Florence-Charlotte route, more than it can support.

"There are eight round trips a day there now, so somebody is going to kill off somebody over there soon."

West Columbia, were enroute from Cayce to Cypress Gardens when the mishap occurred.

Ralph Hamer, leading the county rescue squad, said the sheriff's department received a call from Davis Tackle Shop about 8:30 a.m. Within minutes, the Civil Air Patrol had a plane over the lake and the S.C. Wildlife and rescue squad personnel were on the scene. By 10:30, all the canoeists were safe, shivering from the 50 degree water, but alive.

"If we had been 20 minutes later, we would have lost some of them," Hamer said.



PRIZES and TRIP to WASHINGTON, D.C.

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Nominations being accepted for Flight Instructor/Maintenance Man of Year

If you know of an outstanding flight instructor or maintenance technician who you feel deserves recognition, why not nominate him or her for the general aviation Flight Instructor/Maintenance Technician of the Year awards.

Nominations are now being accepted for the 19th annual awards program designed to single out the most outstanding flight instructor and maintenance technician in the country.

The program is presented by the AOPA Air Safety Foundation, General Aviation Manufacturers Association, National Business Aircraft Association and the Federal Aviation Administration with the support of the general aviation industry and associated organizations.

ELIGIBILITY

All nominees must be employed in the United States as full time civilian certificated flight instructors or as full time FAA certificated aviation mechanics or FCC licensed technicians working on general aviation aircraft or accessories.

SELECTION CRITERIA

Nominees will be judged on the basis of specific achievements and/or sustained superior performance in their field. Entries should list as many specific contributions/achievements

as possible, but in no case should be longer than 500 words. Substantiating documentation such as newspaper/magazine articles and related awards may be included. Contributions made by nominees to aviation safety will count heavily in the selection process. Nomination forms are available from FBO's and the FAA District Office in Columbia.

PROCEDURES

Nominations should be submitted to the Columbia FAA General Aviation District Office by Aug. 17, 1981. These will be forwarded to FAA's Southern Region Office in Atlanta where 11 regional winners will be selected by a committee drawn from the FAA and a variety of general aviation organizations. The regional nominations will be sent to Washington where the national winner will be selected on Sept. 21, 1981.

AWARD PRESENTATION

Regional winners will receive awards at times and places designated by their FAA regional accident prevention coordinators. The national award will be presented at the FAA headquarters in Washington, D.C. on Thursday, Oct. 15, 1981. Travel to the ceremony and expenses for the winner and one guest, as well as a variety of gifts, will be provided by the program sponsors.

Shea named FAA Director of Airports

William F. Shea, Aviation Director for the Port of Portland, Ore., has been appointed the Federal Aviation Administration's Associate Administrator for Airports.

In his new post, Shea is responsible for the administration of the multi-million dollar airport aid program, which is pending reauthorization by Congress. He also oversees the agency's airport certification program and the establishment of national airport standards and requirements. Other duties include overall management responsibility for the two FAA-operated airports in the Washington, D.C., area — National and Dulles.

Shea, 52, took over as Portland's Aviation Director in 1976 and was responsible for administering Portland International Airport and two general aviation (non-airline) fields. Prior to that, he was Commissioner of Transportation for Broome County, N.Y., from 1974-1976 and Commissioner of Aviation from 1971-1973. In between those assignments, he served for a year as the chief of the Aeronautics Division in the California Department of Transportation.

A former educator, Shea began his aviation career as manager of the Burlington (Vt.) International Airport in 1968. Previously, he was Chancellor of Hawthorne College in New Hampshire and also taught government there.

Unlocked pilot's seat causes fatal crash

According to the June issue of the Aviation Monthly Safety Summary and Report, all aboard an aircraft died because the pilot's seat was not locked into position.

The pilot's seat was not locked properly. It slid rearward on the seat rails during liftoff. The aircraft pitched up, and the engine power was reduced abruptly from takeoff to idle. The aircraft stalled, entered a low altitude spin and crashed. All occupants died.

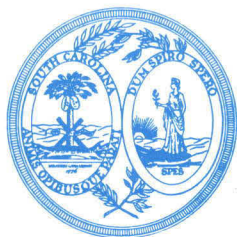
Why does this type of accident occur? One reason is that a pilot will hold on to the control yoke and the throttle as the seat slides aft. This will make the aircraft pitch up to a steep,

nose high altitude and will reduce engine power. In many cases, the pilot cannot maintain or regain control when his aircraft's pitch angle increases abruptly.

Almost all aircraft are equipped with adjustable pilot seats. If you normally adjust your seat to its forwardmost position, make certain that the seat is properly locked prior to takeoff. Be extra careful if you have difficulty adjusting the seat to the desired position. If the seat does not slide freely on the rails prior to locking, it may be extremely difficult to determine if the pins are actually in the pin holes.

Pawley's Island man wins certificate

Edgar S. Davis, of 2 Simons Lane, Pawley's Island, was one of two southern region winners of a \$100 gift certificate in the General Aviation Manufacturers sweepstakes for April. Davis attended an FAA sponsored safety meeting and filled out the slip for the sweepstakes. His was chosen in a drawing.



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727 dive caused by extended wing slat

The 34,000-foot dive of a TWA 727 near Saginaw, Mich., was caused by an extended right wing slat that could not be retracted, and the captain's "untimely flight control inputs" to correct resulting roll forces, the National Transportation Safety Board reported today.

Contributing to the cause was a pre-existing misalignment of the No. 7 right wing slat which, when combined with air pressure upon it at cruise speed, prevented successful retraction, the Safety Board held. Slat is lift enhancement devices on wing leading edges; there are eight slats on a Boeing 727, numbered in order from the pilot's left.

Lengthy investigation showed that the slats — or the No. 7 slat alone — could not have been extended by mechanical malfunction. The Board concluded that slats No. 2, 3, 6 and 7 were extended as "the result of the flightcrew's manipulation of the flap/slat controls," and all but No. 7 then were retracted.

"Contributing to the captain's untimely use of flight controls was distraction due probably to his efforts to rectify the source of the control problem," the Board held.

The Boeing 727 dove from 39,000 feet to about 5,000 feet before the captain recovered control and pulled the airliner out of its spiraling dive. The April 4, 1979 flight was scheduled for Minneapolis/St. Paul from New York, but an emergency landing was made in Detroit.

Of the 82 passengers and seven crewmembers aboard, eight passengers suffered minor injuries

from the high gravity forces encountered in the dive. The aircraft was substantially damaged.

The Safety Board's investigation showed that the airliner had rolled 35 degrees to the right while it was cruising at 39,000 feet. The captain corrected this roll and leveled the wings, but a second roll was checked only momentarily before control was lost and the plane rapidly rolled onto its back. The Board said the 727 made a complete roll and remained uncontrollable until the No. 7 slat tore from the wing as the airliner dove below 15,000 feet.

Flight crewmembers testified that they did not extend leading edge slats or trailing edge flaps. The Board did not have cockpit voice recorder (CVR) evidence because most of the 30-minute tape was erased. But from lengthy investigation, which included both flight simulation and actual flight testing, the Board found that "the possibility of a series of malfunctions and failures occurring which permitted the slat to extend aerodynamically or hydraulically is extremely remote."

Comparison of flight test data with flight recorder data from the accident airplane led the Board to conclude that the Nos. 2, 3, 6 and 7 slats were extended "as a consequence of flightcrew action."

The Board said accidental actuation of the flap lever, or the crew's operation of an alternate means of extending leading edge slats, was not likely. Although it said it cannot determine why the four slats were extended, the Board listed as a third possibility "an unsuccessful attempt to

extend trailing edge flaps independently of leading edge slats, possibly in an effort to improve aircraft performance."

The Board found that although the captain's extension of the landing gear in an effort to regain control significantly reduced the speed of the dive, "recovery would have been doubtful" if the one extended slat had remained in place.

The aircraft's CVR tape was blank except for nine minutes of flightcrew conversation after the landing in Detroit. The captain said he did not recall erasing the tape after landing, although he may have because he usually does so after each of his flights to preclude inappropriate use of recorded conversations.

The Safety Board said erasure of the tape by the captain is a possibility that "we cannot ignore and cannot sanction. Although we recognize that habits can cause actions not desired or intended by the actor, we have difficulty accepting the fact that the captain's putative habit of routinely erasing the CVR after each flight was not restrainable after a flight in which disaster was only narrowly averted."

The Safety Board's complete printed report will be available in approximately one month. Single copies may be obtained without charge by writing to the Publications Branch, National Transportation Safety Board, Washington, D.C. 20594. Multiple copies may be purchased by mail from the National Technical Information Service, U.S. Department of Commerce, Springfield, Virginia 22161.